

GAO

United States General Accounting Office

Report to the Chairman, Subcommittee  
on National Security, Committee on  
Appropriations, House of  
Representatives

April 1997

MILITARY AIRLIFT

Savings Achievable by  
Eliminating Support  
Operations at Torrejon  
Air Base, Spain



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National Security and  
International Affairs Division

B-276305

April 21, 1997

The Honorable C.W. (Bill) Young  
Chairman, Subcommittee on  
National Security  
Committee on Appropriations  
House of Representatives

Dear Mr. Chairman:

The Department of Defense (DOD) increasingly relies on its global network of en route bases<sup>1</sup> to provide logistical support to military airlift aircraft during contingencies. According to Air Mobility Command documents, two en route bases in Spain—Torrejon and Zaragoza—supported about 50 percent of the Air Mobility Command's airlift missions during Operations Desert Shield and Desert Storm. However, according to Spanish government officials, Torrejon Air Base's proximity to Madrid, the capital of Spain, makes its use by the U.S. military highly visible and politically sensitive.

This report addresses (1) the future use of Torrejon Air Base in Spain for airlift operations, (2) the cost savings that would be realized if the Air Mobility Command's presence at that base was ended, and (3) alternatives the Air Mobility Command is considering to the current use of Torrejon Air Base. We conducted this review under our basic legislative responsibilities and are addressing the report to you because it addresses key issues under your Subcommittee's jurisdiction.

## Background

Global airlift operations use a network of 13 key en route locations to support the peacetime flow of U.S.-based strategic airlift aircraft. An additional 18 bases provide support through terminal service contract operations and Navy-operated terminals. Long-range strategic airlift aircraft—such as the C-5, C-141, and C-17—generally land, approximately every 3,500 miles, at one of these bases for refueling, maintenance, crew changes, and/or cargo handling. These locations also serve as bases from which to expand operations rapidly during contingencies and war.

DOD will spend about \$1.9 billion in fiscal year 1997 to operate and maintain the network of en route bases used by the Air Mobility

<sup>1</sup>The en route basing system is a global network of manpower, materiel, and facilities that provides command and control, logistics, and aerial port services to air mobility forces performing U.S. Transportation Command worldwide missions.

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Command.<sup>2</sup> DOD has also identified about \$1 billion in construction projects and infrastructure upgrades that need to be completed in fiscal years 1997-2001 to enhance this network of en route bases. (See apps. I and II, respectively, for more details about the operation and maintenance costs and the construction and upgrade costs.)

The airlift operations are managed by the Air Mobility Command, a component of the U.S. Transportation Command, located at Scott Air Force Base, Illinois. Figure 1 shows the 13 key peacetime en route bases and highlights 4 other en route bases discussed in this report.

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<sup>2</sup>These costs represent the annual operating costs of the bases; the majority of these costs relate to activities other than airlift operations.

Figure 1: En Route Bases Used by the Air Mobility Command



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The Air Mobility Command currently has access to three en route bases in Spain: Rota Naval Air Station, Moron Air Base, and Torrejon Air Base. Since Operations Desert Shield and Desert Storm, the U.S. presence in Spain has decreased significantly. The U.S. Air Force has relinquished use of its designated facilities at Zaragoza Air Base and turned them over to Spanish authorities. At Torrejon Air Base, DOD transferred the headquarters, 16th Air Force, including the 401st Tactical Fighter Wing, to Italy and relocated the remaining personnel to other DOD installations except for a small Air Mobility Command caretaker staff.

Torrejon Air Base primarily supports military airlift. During Operations Desert Shield and Desert Storm, it handled about 31 percent of Air Mobility Command's airlift missions. Rota Naval Air Station serves as the Air Mobility Command's primary peacetime base in Spain for military airlift aircraft and provides a limited crisis response capability during buildup for a contingency at the other two bases. It also provides refueling and weapons support to the Navy's Sixth Fleet ships and aircraft. Moron Air Base is the headquarters for the 496th Air Base Squadron; administers the Spain base maintenance contract, which provides civil engineering, supply, and transportation services; and provides support to military airlift for contingencies and deployment exercises.

U.S. military activities in Spain are governed by the Agreement on Defense Cooperation between the Kingdom of Spain and the United States, signed on December 1, 1988. The agreement entered into force on May 4, 1989, and is in effect for 8 years. It is extended for 1-year periods unless one of the parties notifies the other in writing of its intent not to extend the agreement.

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## Results in Brief

The future use of Torrejon Air Base by the Air Mobility Command is questionable. DOD, State Department, and U.S. Embassy officials acknowledge that the government of Spain does not want the Command to use Torrejon Air Base to support future airlift missions. The Spanish government suggested that the Command relocate its personnel stationed at Torrejon Air Base to another base in Spain. Although the Air Mobility Command did not relocate its civilian and military personnel, in July 1996 the U.S. Transportation Command terminated a planned fuel system upgrade at the base for which it had already spent \$800,000 and reprogrammed the remaining \$2.5 million for other needs.

Discontinuing operations at Torrejon Air Base and eliminating both civilian and military positions would result in an annual savings of \$515,000. The Air Mobility Command could also save about \$200,000 annually in operations and maintenance costs by discontinuing its operations at Torrejon Air Base and eliminating its civilian positions. These savings would continue to accrue, at a minimum, until an alternative location is selected to fill the capacity viewed as lost by discontinuing operations at Torrejon Air Base. The Command could save an additional \$315,000 in military personnel costs if it eliminated the military positions from the force structure.

The Air Mobility Command has short-term alternatives to the use of Torrejon Air Base. These alternatives include relying on the four key European bases—Mildenhall Air Base, England; Moron Air Base, Spain; and Rhein Main and Ramstein Air Bases, Germany—to the maximum extent possible and using other locations, as necessary. Additionally, the Air Mobility Command, in conjunction with officials from the U.S. Transportation Command and U.S. Air Forces, Europe, is considering three long-term alternatives to make the en route system capable of carrying out its peacetime and wartime missions and replace the capability provided by Torrejon Air Base. These alternatives include (1) adding limited capability to Rota Naval Air Station and reopening and enhancing Zaragoza Air Base, Spain; (2) significantly enhancing Rota Naval Air Station, Spain, and adding limited capability to Fairford Air Base, England; and (3) reopening and enhancing Zaragoza Air Base and adding limited capability to Fairford Air Base. However, the Spanish government, which has final approval over all activities at the bases in Spain, delayed the approval of site surveys at Rota Naval Air Station and Zaragoza Air Base because of political issues. As of April 1997, the Air Force had completed the site survey at Rota Naval Air Station but had not completed the survey at Zaragoza Air Base.

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## Air Mobility Command's Continued Use of Torrejon Air Base Is Questionable

According to Department of State and U.S. Embassy officials, senior Spanish military officials have indicated that political sensitivities will severely complicate U.S. use of Torrejon Air Base during future contingencies. On several occasions, the Spanish government has suggested that the Air Mobility Command relocate its military personnel permanently stationed at the base to Moron Air Base, Rota Naval Air Station, or Zaragoza Air Base. Air Mobility Command officials stated that since Operations Desert Shield and Desert Storm, Spain has been increasingly sensitive about allowing the U.S. military to use Torrejon Air

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Base for contingency operations. The primary reason for this position is that any U.S. military activity at the base is highly visible to the Spanish population because the base is located near the capital city of Madrid.

The Spanish government's sensitivities have led to a general consensus among Department of State, U.S. Air Force, U.S. Transportation Command, and Air Mobility Command officials that the Air Mobility Command should consider alternative bases for peacetime use and contingency operations. As a result, the U.S. Transportation Command ceased its upgrade of the fuel system at Torrejon Air Base, after spending approximately \$800,000 of the \$3.3 million it had planned to spend on this upgrade. The Command has since reprogrammed the remaining \$2.5 million for projects at other DOD installations.

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## Termination of Air Mobility Command Operations at Torrejon Air Base Could Result in Savings

Despite the Spanish government's sensitivities, the Air Mobility Command continues to station 14 personnel (9 military and 5 civilian staff) at Torrejon Air Base. Our analysis showed that the Air Mobility Command could save about \$200,000 annually in operations and maintenance<sup>3</sup> costs by simply ceasing operations at Torrejon Air Base and eliminating the civilian positions. These savings include \$175,000 in civilian personnel costs and \$25,000 in other support costs. The Air Mobility Command could save an additional \$315,000 in military personnel costs if it eliminated the military positions from the force structure. Discontinuing operations at Torrejon Air Base and eliminating both civilian and military positions would result in an annual savings of \$515,000.

DOD officials told us they believe the Air Mobility Command should continue to maintain its small presence at Torrejon Air Base. They stated that the \$515,000 is a minimal investment to retain possible future access to a large infrastructure that can be expanded rapidly during a contingency. Nevertheless, the Air Mobility Command is evaluating alternatives to maintaining a presence at the base.

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## Alternatives to Torrejon Air Base

The Air Mobility Command has both short-term and long-term alternatives to the continued use of Torrejon Air Base.

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<sup>3</sup>Operations and maintenance funds are used by the services to carry out day-to-day activities, such as the recruitment and fielding of a trained and ready force, equipment maintenance and repair, child care and family centers, transportation services, civilian personnel management and pay, and maintenance of the infrastructure to support the services.

<b>Short-term Alternatives</b>	If Spain does not allow U.S. use of Torrejon Air Base and a contingency occurs, the Air Mobility Command could use other en route bases while it identifies and implements a long-term alternative. In the short term, the Air Mobility Command could use, to the maximum extent possible, four key European bases—Mildenhall Air Base, England; Moron Air Base, Spain; and Rhein Main and Ramstein Air Bases, Germany—plus the limited capability available at Rota Naval Air Station, Spain. In addition, the Air Mobility Command could supplement the key locations by using other air bases, including Lajes, Azores; Incirlik, Turkey; and Fairford, England.
<b>Long-term Alternatives</b>	<p>Air Mobility Command officials believe that the United States continues to need another major en route base in Spain to replace Torrejon Air Base. They cite the following factors as favoring a base in Spain over other European locations: (1) better weather, particularly in winter months; (2) shorter flights from the continental United States, resulting in lower fuel consumption and bigger payloads; and (3) ease in obtaining overflight permission.</p> <p>The European Working Group, established in early 1996, assessed the adequacy of the infrastructure at the en route bases in Europe to support peacetime and contingency operations.<sup>4</sup> The Group concluded that the current en route basing infrastructure does not meet the theater commander's airlift requirements and recommended relying on the four main European air bases we cited previously. The Group further recommended that the United States establish another base, preferably a large base in either Spain or Portugal, to meet requirements. In the past, that base would have been Torrejon Air Base.</p> <p>Based on the European Working Group's assessment, as of January 1997, the Air Mobility Command, the U.S. Transportation Command, and U.S. Air Forces, Europe, officials developed three alternatives to replace the capacity that would be lost if the Air Mobility Command loses access to Torrejon Air Base. The three alternatives are</p> <p>(1) reopening and enhancing the capacity of Zaragoza Air Base, Spain, and adding limited additional capacity to Rota Naval Air Station, Spain;</p>

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<sup>4</sup>The European Working Group was formed to develop long-term strategy options for ensuring adequate en route support in Europe for strategic air mobility operations. The Group includes representatives from the Joint Staff, U.S. Transportation Command, U.S. European Command, U.S. Central Command, air component staffs, service staffs, the Defense Logistics Agency, and the Defense Fuel Supply Center.

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- (2) significantly enhancing the capacity of Rota Naval Air Station, Spain, and adding limited additional capacity to Fairford Air Base, England; or
- (3) reopening and enhancing the capacity of Zaragoza Air Base and adding limited capacity to Fairford Air Base.

Under alternative 1, the additional enhancements needed at Zaragoza Air Base would be, at a minimum, a fuel hydrant system, fuel storage tank, fuel pipeline improvements, and runway resurfacing. The limited enhancement of capacity needed at Rota Naval Air Station includes an ongoing upgrade of Rota Naval Air Station's fuel system to a five-hydrant operation and another fuel storage tank.

Under alternative 2, the significant capacity enhancement needed at Rota Naval Air Station includes the enhancement described in alternative 1 plus seven additional fuel hydrants, an additional fuel storage tank, a resurfaced runway, and expanded ramp areas. Fairford Air Base would require an additional fuel storage tank, upgraded fuel hydrant system, some runway refurbishment, and ramp improvements. Under alternative 3, Zaragoza Air Base would be enhanced as described in alternative 1, and Fairford Air Base would be improved as described in alternative 2.

According to Air Mobility Command officials, alternative 1 takes more advantage of the factors favoring Spanish bases, but alternatives 2 and 3 reduce the risk of being denied base access during a contingency by locating only two bases in a single country. Within Spain, there are trade-offs between Zaragoza Air Base and Rota Naval Air Station. Zaragoza Air Base has greater capacity and expansion potential, but Rota Naval Air Station is a seaport with easy access to fuel, and the Navy funds normal base operating support costs. Air Mobility Command officials believe that with a significantly increased Air Mobility Command presence at Rota Naval Air Station, the Navy may not be willing to fund all the base operating costs. The Air Mobility Command plans to evaluate these three alternatives and provide detailed cost estimates for the improvements needed after completing the site surveys.

As of April 1997, the Air Mobility Command was still considering alternatives for replacing Torrejon Air Base. Air Mobility Command officials said they had not decided on a long-term alternative, primarily because the current political climate in Spain has caused the Spanish government to delay the proposed site surveys at Zaragoza Air Base and Rota Naval Air Station. The Air Force completed the site survey at Rota

Naval Air Station in March 1997 but has not completed the site survey at Zaragoza Air Base.

## Conclusions and Recommendations

Political sensitivities in Spain have made the future use of Torrejon Air Base questionable for the support of future contingency operations and have delayed site surveys at the alternative Spanish bases being considered. Given the political sensitivities and the potential savings if the Air Mobility Command ceases operations at the base, we recommend that the Secretary of Defense direct the Commander of the Air Mobility Command to devise a plan to eliminate in a timely manner its military support operations at Torrejon Air Base. We also recommend that the Secretary of Defense use this plan, if necessary, as part of a strategy in negotiating with Spain on other installations.

## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with the overall thrust of our recommendation to eliminate the military support operations at Torrejon Air Base in a timely manner and stated that the Air Mobility Command planned to terminate operations at Torrejon Air Base by the end of fiscal year 1997. DOD did not believe that net cost savings would result from eliminating the Air Mobility Command's presence at Torrejon Air Base because any cost savings realized by eliminating the Air Mobility Command's presence at Torrejon Air Base would be offset by the investment and manpower required to replace the en route capability lost at the base. We agree that the cost of operations at an alternative base need to be considered but believe that, depending on the alternative selected, DOD could realize some net savings. For example, if the Air Mobility Command chooses Rota Naval Air Station, where it already has a large contingent of personnel, additional operating expense would be minimal. If other alternatives are chosen, the Air Mobility Command could use DOD personnel already stationed at the bases, as it currently does at many bases in the en route system. According to DOD, a realistic estimate of the operations and maintenance costs attributable to en route operations would be very small for bases with other ongoing operations.

DOD also provided technical comments, which we have incorporated where appropriate. (DOD's comments are presented in their entirety in app. III.) The Department of State reviewed a draft of this report and advised us that it had no objection to the findings as they relate to the Department's operations and had no suggested changes to the language of the report.

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## Scope and Methodology

To obtain information on the future use of Torrejon Air Base for airlift operations, we examined the Agreement on Defense Cooperation with Spain and reviewed documents on the Spanish government's position on U.S. bases in Spain and the political climate in Spain. We discussed these documents and related issues with officials from the Office of the Secretary of Defense, the Department of State, Air Force Headquarters, the U.S. Transportation Command, the Air Mobility Command, and the U.S. Embassy in Spain.

To identify the potential savings that would be realized by eliminating the Air Mobility Command's operations at Torrejon Air Base, we reviewed documents and reports relevant to the costs of supporting the military and civilian personnel assigned to the base. We discussed these costs and potential savings with Air Mobility Command officials.

To obtain information on alternatives to the current use of Torrejon Air Base, we reviewed the U.S. Air Forces, Europe, and Air Mobility Command's analyses of alternative en route bases and Department of State assessments of these alternatives. We also reviewed DOD, U.S. Transportation Command, and Air Mobility Command reports and studies on current and future airlift requirements and basing capacities. At each of these agencies, we interviewed officials concerning the alternative bases, basing capacities, and airlift requirements.

We conducted our review between April 1996 and April 1997 in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Secretaries of Defense and the Air Force and other interested congressional committees. Copies will also be made available to others upon request.

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Please contact me at (202) 512-3961 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix IV.

Sincerely yours,



Mark E. Gebicke  
Director, Military Operations  
and Capabilities Issues

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Table II.1: Costs to Improve Infrastructure at En Route Bases Used by the Air Mobility Command

Figure 1: En Route Bases Used by the Air Mobility Command

## Abbreviations

DBOF-T	Defense Business Operations Fund-Transportation
DOD	Department of Defense
MILCON	military construction
O&M	operations and maintenance



# Costs to Operate and Maintain Bases Used by the En Route System

The Department of Defense (DOD) spent about \$2 billion in fiscal year 1996 to operate and maintain the network of en route bases used by the Air Mobility Command. Table I.1 shows the projected costs associated with operating and maintaining the bases for fiscal year 1997. U.S. operations at the en route bases are funded from the Air Force's operations and maintenance (O&M) account, Air Force and Defense Logistics Agency's military construction (MILCON) accounts, host nation support,<sup>1</sup> and the Defense Business Operations Fund for Transportation (DBOF-T).<sup>2</sup> Because these costs include various types of peacetime and wartime missions, we could not separate the costs of the Air Mobility Command's airlift operations from costs for other purposes.<sup>3</sup> For example, Misawa Air Base, Japan, is home to the 35th Fighter Wing (F-16 aircraft). Accordingly, the vast majority of the \$42 million we identified in Air Force O&M costs likely relates to fighter rather than airlift operations.

**Table I.1: Costs to Operate and Maintain the Bases Used by the Air Mobility Command's En Route System (Projected for Fiscal Year 1997)**

Dollars in millions

En route base	Funding source <sup>a</sup>					
	O&M <sup>b</sup>	MILCON	Defense Logistics Agency <sup>c</sup>	U.S. total	Host nation	Base total <sup>d</sup>
<b>13 key peacetime bases shown in figure 1</b>						
Yokota, Japan	\$58.8	0	\$0.7	\$59.5	\$296.1	\$355.6
Elmendorf, Alaska	264.4	\$21.5	20.1	306.1	0	306.1
Kadena, Japan	178.9	0	0.5	179.4	1.7	181.1
Hickam, Hawaii	164.2	0	1.1	165.3	0	165.3
Ramstein, Germany	143.0	5.4	0.2	148.6	0	148.6
Osan, Korea	104.6	9.8	0.4	114.8	21.3	136.1
Incirlik, Turkey	83.1	7.2	0.4	90.6	0	90.6
Mildenhall, England	77.0	6.2	0.3	83.5	0	83.5
Anderson, Guam	56.8	0	2.3	59.1	0	59.1

(continued)

<sup>1</sup>Host nation support includes the host government's contributions for foreign national direct and indirect hires, utilities, fuel, ramp rent, and landing fees at various locations. It also includes in-kind support for war reserve and depot maintenance in Korea.

<sup>2</sup>Air Mobility Command customers pay the DBOF-T (now called the Defense Working Capital Fund) from their appropriated funds for transportation services they receive. DBOF-T funds daily operational expenses for Air Mobility Command DBOF-T units at the en route bases, aerial port operations, aircraft maintenance, command post, DBOF-T civilian pay, major repair, and minor construction.

<sup>3</sup>During our review, the U.S. Air Force was unable to provide us with costs specifically related to airlift operations.

**Appendix I**  
**Costs to Operate and Maintain Bases Used**  
**by the En Route System**

Dollars in millions

<b>En route base</b>	<b>Funding source<sup>a</sup></b>					
	<b>O&amp;M<sup>b</sup></b>	<b>MILCON</b>	<b>Defense Logistics Agency<sup>c</sup></b>	<b>U.S. total</b>	<b>Host nation</b>	<b>Base total<sup>d</sup></b>
Rhein Main, Germany	\$23.0	0	0	\$23.0	\$8.0	\$31.0
Rota, Spain	0	0	\$1.7	1.7	0	1.7
Howard, Panama	0.1	0	1.5	1.6	0	1.6
Lajes, Azores	0.2	0	1.1	1.3	0	1.3
<b>Subtotal</b>	<b>\$1,154.1</b>	<b>\$50.1</b>	<b>\$30.0</b>	<b>\$1,234.2</b>	<b>\$327.1</b>	<b>\$1,561.3</b>
<b>Other bases shown in figure 1</b>						
Moron, Spain	\$15.9	0	\$12.9	\$28.8	0	\$28.8
Torrejon, Spain	0.2	0	0.3	0.5	0	0.5
Zaragoza, Spain <sup>e</sup>						
Fairford, England <sup>f</sup>						
<b>Subtotal</b>	<b>\$16.1</b>	<b>0</b>	<b>\$13.2</b>	<b>\$29.3</b>	<b>0</b>	<b>\$29.3</b>
<b>Bases not shown in figure 1</b>						
Aviano, Italy	\$81.9	\$10.1	\$0.2	\$92.2	0	\$92.2
Eielson, Alaska	82.0	0	1.9	83.9	0	83.9
Kunsan, Korea	65.9	0	0.4	66.3	0	66.3
Misawa, Japan	42.5	0	0.5	43.0	0	43.0
Dhahran, Saudi Arabia	0	0	0	0	\$7.0	7.0
Sigonella, Italy	0	0	6.5	6.5	0	6.5
Diego Garcia, Indian Ocean	0	0	3.8	3.8	0	3.8
Bahrain, Bahrain	0	0	0	0	3.4	3.4
Guantanamo, Cuba	0	0	1.5	1.5	0	1.5
Souda Bay, Crete	0	0	0.5	0.5	0	0.5
<b>Subtotal</b>	<b>\$272.3</b>	<b>\$10.1</b>	<b>\$15.3</b>	<b>\$297.6</b>	<b>\$10.4</b>	<b>\$308.0</b>
<b>Total<sup>g</sup></b>	<b>\$1442.5</b>	<b>\$60.1</b>	<b>\$58.4</b>	<b>\$1,561.1</b>	<b>\$337.5</b>	<b>\$1,898.6</b>

(Table notes on next page)

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**Appendix I**  
**Costs to Operate and Maintain Bases Used**  
**by the En Route System**

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Note: We did not validate the costs for operating and maintaining the en route bases. The en route bases are used for various types of missions, and the costs provided by DOD include those related to airlift and other types of operations. We could not separate the airlift-related costs.

<sup>a</sup>DBOF-T funding is not included.

<sup>b</sup>The amounts shown are Air Force O&M funding only.

<sup>c</sup>Defense Logistics Agency includes Defense Fuel Supply Center funding.

<sup>d</sup>Does not include costs for medical, housing, and contingencies.

<sup>e</sup>Zaragoza Air Base is not occupied by the United States.

<sup>f</sup>Costs were not obtained for Fairford Air Base.

<sup>g</sup>Totals may not add due to rounding.

Source: GAO's analysis of data provided by the U.S. Air Force and Defense Logistics Agency.

# Costs to Improve Infrastructure at En Route Bases

The Air Mobility Command has conducted site surveys of bases in Europe and the Pacific and identified over \$1 billion in construction projects and infrastructure repair upgrades that need to be completed during fiscal years 1997-2011 to ensure that the Command can carry out its peacetime and wartime missions. The site surveys identified deficiencies in airfield runways and ramps, fuel systems, maintenance and aerial port facilities, and base support facilities such as dormitories and dining halls.

The U.S. Transportation Command and Air Mobility Command are working with the Joint Staff, the services, the Defense Logistics Agency, the Defense Fuel Supply Center, and the overseas service commands to program for immediate funding of those projects that could have a significant impact on the ability of the U.S. military to carry out its wartime and peacetime missions. However, the Defense Logistics Agency has already reported a significant shortfall in funding for these projects and is seeking additional funding during the next 5 fiscal years. Table II.1 shows the costs to upgrade the network of en route bases.

**Table II.1: Costs to Improve Infrastructure at En Route Bases Used by the Air Mobility Command (Projected for Fiscal Years 1997-2011)**

Dollars in millions

En route base	Funding source <sup>a</sup>						
	O&M <sup>b</sup>	MILCON	Defense Logistics Agency	Other <sup>c</sup>	U.S. total	Host nation	Base total
<b>13 key peacetime bases shown in figure 1</b>							
Ramstein, Germany	\$7.5	\$3.0	0	\$16.5	\$27.1	\$170.6	\$197.6
Anderson, Guam	3.0	0	\$143.2	0.3	146.5	0	146.5
Elmendorf, Alaska	6.3	8.0	122.3	3.8	140.4	0	140.4
Yokota, Japan	10.3	0	18.8	3.1	32.1	98.0	130.1
Hickam, Hawaii	7.1	15.0	50.3	2.5	74.8	0	74.8
Osan, Korea	3.5	0	8.3	0.5	12.3	48.4	60.8
Kadena, Japan	4.8	0	3.0	11.0	18.7	25.9	44.6
Lajes, Azores	12.6	0	23.9	3.6	40.2	0	40.2
Mildenhall, England	6.9	0	2.8	2.3	12.0	0	12.0
Rhein Main, Germany	7.0	0	2.2	0.2	9.4	0	9.4
Rota, Spain	3.2	0	0	0	3.2	0	3.2
Incirlik, Turkey	0.3	0	0.8	0	1.1	0	1.1
Howard, Panama <sup>d</sup>							
<b>Subtotal</b>	<b>\$72.6</b>	<b>\$26.0</b>	<b>\$375.5</b>	<b>\$43.7</b>	<b>\$517.8</b>	<b>\$342.9</b>	<b>\$860.7</b>

(continued)

**Appendix II**  
**Costs to Improve Infrastructure at En Route**  
**Bases**

Dollars in millions

En route base	Funding source <sup>a</sup>						Host nation	Base total
	O&M <sup>b</sup>	MILCON	Defense Logistics Agency	Other <sup>c</sup>	U.S. total			
<b>Other bases shown in figure 1</b>								
Fairford, England	0	0	0	\$5.0	\$5.0		\$35.0	\$40.0
Iberian Base <sup>e</sup>	\$4.5	0	\$25.0	0	39.5		0	39.5
Moron, Spain	0.3	0	27.4	0.3	28.0		0	28.0
Zaragoza, Spain <sup>d</sup>								
<b>Subtotal</b>	<b>\$4.8</b>	<b>0</b>	<b>\$62.4</b>	<b>\$5.3</b>	<b>\$72.5</b>		<b>\$35.0</b>	<b>\$107.5</b>
<b>Bases not shown in figure 1</b>								
Misawa, Japan	\$2.8	0	\$60.0	\$0.2	\$63.0		\$5.4	\$68.4
Eielson, Alaska	2.6	0	28.0	0.6	31.1		0	31.1
Iwakuni, Japan	0.3	0	18.0	0.3	18.6		7.5	26.1
Sigonella, Italy	3.3	0	6.0	0	9.3		0	9.3
Kinsan, Korea	2.5	0	0	0	2.5		6.3	8.8
Aviano, Italy	2.6	0	1.9	0.5	5.0		0.3	5.3
Diego Garcia, Indian Ocean	0	\$2.0	0	0	2.0		0	2.0
Paya Lebar, Singapore	1.2	0	0	0.3	1.5		0	1.5
Kimhae, Korea	0.7	0	0	0.8	1.0		0	1.0
Naples, Italy	0	0	0	0	0.8		0	0.8
U Taphao, Thailand	0	0	0.7	0	0.7		0	0.7
Suwon, Korea	0.6	0	0	0.2	0.6		0	0.6
Kwang Ju, Korea	0.4	0	0	0	0.6		0	0.6
Pohang, Korea	0.4	0	0	0	0.4		0	0.4
Chong Ju, Korea	0.4	0	0	0	0.4		0	0.4
Cairo, Egypt	0.3	0	0	0	0.3		0	0.3
Fukuoka, Japan	0.3	0	0	0	0.3		0	0.3
Taegu, Korea	0.1	0	0	0	0.1		0	0.1
Pisa, Italy	0.1	0	0	0	0.1		0	0.1
<b>Subtotal<sup>f</sup></b>	<b>\$18.5</b>	<b>\$2.0</b>	<b>\$114.6</b>	<b>\$3.2</b>	<b>\$138.3</b>		<b>\$19.5</b>	<b>\$157.8</b>
<b>Total<sup>f</sup></b>	<b>\$95.9</b>	<b>\$28.0</b>	<b>\$552.5</b>	<b>\$52.1</b>	<b>\$728.5</b>		<b>\$397.3</b>	<b>\$1,125.9</b>

(Table notes on next page)

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**Appendix II**  
**Costs to Improve Infrastructure at En Route**  
**Bases**

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Note: We did not validate the estimated costs provided by the Air Mobility Command for projected infrastructure improvements at the en route bases or the justifications for those improvements.

<sup>a</sup>The amounts shown are Air Force O&M and DBOF-T funding.

<sup>b</sup>Defense Logistics Agency includes Defense Fuel Supply Center funding.

<sup>c</sup>Includes Air Force Materiel Command and U.S. Transportation Command's mobility enhancement funds.

<sup>d</sup>Base not surveyed; no cost estimate available.

<sup>e</sup>Iberian Base (such as Torrejon or Zaragoza Air Base) represents a place holder until an alternative is identified for Torrejon Air Base.

<sup>f</sup>Totals may not add due to rounding.

Source: GAO's analysis of data provided by the Air Mobility Command.

# Comments From the Department of Defense



OFFICE OF THE SECRETARY OF DEFENSE  
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April 10, 1997

Mr. Mark E. Gebicke  
Director, Military Operations and Capabilities Issues  
National Security and International Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Gebicke:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "MILITARY AIRLIFT: Savings Achievable by Eliminating Support Operations at Torrejon Air Base, Spain," dated March 5, 1997 (GAO Code 703132 / OSD Case 1305).

The Department concurs with the overall thrust of the GAO recommendation to eliminate the military support operations at Torrejon Air Base in a timely manner, but does not concur with GAO's estimate of the attendant cost savings. Due to potential constraints on the use of the air base during contingency operations and the base's deteriorating infrastructure, the Air Mobility Command (AMC) has taken steps to terminate operations at Torrejon by the end of fiscal year 1997.

However, AMC analyses indicate that the access to en route capability lost by Torrejon's closing must be replaced. Accordingly, as the GAO notes, the European Working Group is reviewing the results of base candidate surveys and conducting discussions with potential host countries to provide the Department with the required capability. The alternatives under review to replace the lost access would all require additional resources. As a result, any cost savings that might be realized by terminating operations at Torrejon would be offset by the cost of replacing the lost infrastructure.

Consequently, the Department recommends that the GAO modify its report to acknowledge the planned closure of Torrejon Air Base and that any identified base closure savings be offset by the costs of providing the required capability elsewhere.

Additional technical corrections were provided separately to the GAO staff. The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,

William J. Lynn  
Director



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